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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,460	04/19/2004	Paul M. Wojciechowski	030048060US1	2994

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PERKINS COIE LLP  
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EXAMINER

DINH, TIEN QUANG

ART UNIT	PAPER NUMBER
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3644

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

km

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/827,460		WOJCIECHOWSKI, PAUL M.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Tien Dinh		3644	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/19/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 36-53, 58-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al in view of the admitted prior art on page 2 and figures 1A-C and Klose or Franz.

Murphy et al discloses a method of manufacturing an aircraft wing with a forward inboard wing portion that integrates an engine support structure that is in front of the leading edge (see figure 1) and a landing gear support structure that is integrated to the aft inboard wing portion toward the trailing edge (see figures 4-6 and 1), but Murphy et al is silent on the use of chordwise wing insert portion to the forward and aft inboard wing portions and attaching the spanwise wing insert portion to the outboard wing portion and to the forward and aft inboard wing portions. Murphy et al is silent on deriving a second wing from a first wing. However, Klose discloses chordwise and spanwise wing insert portions are well known in the art. Furthermore, Franz discloses a chordwise wing insert 26, 28, or 30 and spanwise wing insert 16 are well known in the art. The admitted prior art on page 2 and figures 1A-C discloses that deriving wings are well known in the art.

It would have been obvious to one skilled in the art at the time the invention was made to have derived wings by using chordwise and spanwise wing inserts in Murphy et al's system as taught by the admitted prior art on page 2 and figures 1A-1C and Klose or Franz to easily

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assemble the wing and to repair the wings if needed. Furthermore, it would have been obvious to one skilled in the art at the time the invention was made to derive the wings so that an aircraft can do different missions with a reduced cost.

Please note that wing-roots in a derived wing are inherent.

Re claims 40-41, 50, to derive a new wing that has different sweep angles merely involve steps that one skilled in the art would have done to get a desired wing for the missions to be accomplished.

Re claims 42-44, 51, 52, 53, to have derived similar engine support structure and landing gear support structure from the original parts are obvious steps one skilled in the art would have taken.

Re claim 46, to make the insert portions contiguous are obvious steps one skilled in the art would have taken.

Please note that separation lines can be defined where the wing inserts are located in the wing.

Please note that it would have been obvious to one skilled in the art to have utilized the wing insert portions forward of the landing gear or outboard of the engine support so that the aircraft can increase its strength and performance.

Please see the lines drawn on the Murphy et al reference as to how the examiner interpret the spanwise and chordwise separation lines.

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Claims 54-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al as modified by Franz and Klose as applied to claims 15 and 29 above, and further in view of Mix.

Murphy et al as modified by Franz and Klose discloses all claimed parts except for the use of fuselage inserts in the space defined by the forward and aft fuselage portion. However, Mix discloses that fuselage inserts in the space defined by the forward and aft fuselage portion are well known the art (see the figures).

It would have been obvious to one skilled in the art at the time the invention was made to have made the fuselage of Murphy's et al into forward and aft fuselage portions with fuselage inserts in between to allow the easier manufacturing of the aircraft.

Please note that deriving a second fuselage/aircraft from a first fuselage/aircraft is obvious to one skilled in the art by merely replacing the old parts with new and different parts if desired. Therefore, the first and second forward fuselage portion and the first and second aft fuselage portions are generally the same if the first fuselage portions are replaced with generally the same, but brand new second fuselage portions.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Voigt, Hawkins et al, and Inoue et al disclose aircraft means.

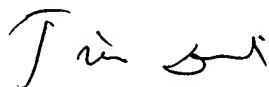
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 703-308-2798. The examiner can normally be reached on 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TD

A handwritten signature in cursive script, appearing to read "Tien Dinh".